CLAIMS

1. An electroconductive powder having an electroconductive layer containing tin oxide and phosphorus, but containing substantially no antimony on the surface of titanium dioxide, and the content of a metallic element having a valence of 4 or less which is contained as an impurity in the electroconductive powder is 0.1 or less as (A) obtained by the following formula (1):

Formula (1): $(A) = (M_1) \times (4-n_1) + (M_2) \times (4-n_2) + (M_3) \times (4-n_3) + (M_4) \times (4-n_4) + \ldots + (M_X) \times (4-n_X)$ (in the above formula, M_1, M_2, M_3, M_4, ..., M_X represent an atomic ratio of each metallic element having a valence of 4 or less to Sn of the tin oxide in the electroconductive powder, n_1, n_2, n_3, n_4, ..., n_X represent a valence number of each metallic element having the atomic ratio of M_1, M_2, M_3, M_4, ..., M_X, X in M_X and n_X represents the number of the metallic element contained in the electroconductive powder and can have a natural number of 1 or more.

2. An electroconductive powder according to claim 1, wherein the amount of the tin oxide forming the electroconductive layer is in the range of 0.015-0.3 g as SnO_2 per 1 m^2 of the surface area of titanium dioxide.

3. An electroconductive powder according to claim 1, wherein the amount of the phosphorus contained in the electroconductive layer with respect to tin

oxide is a proportion of 0.10-0.50 in terms of the atomic ratio P/Sn.

4. An electroconductive powder according to claim 1, wherein the content of the metallic element having a valence of 4 or less which is contained in titanium dioxide as an impurity is 0.02 or less as (B) obtained by the following formula (2):

Formula (2): $(B) = (M'_1) \times (4-n'_1) + (M'_2) \times (4-n'_2) + (M'_3) \times (4-n'_3) + (M'_4) \times (4-n'_4) + \ldots + (M'_Y) \times (4-n'_Y)$

(in the above formula, M'_1, M'_2, M'_3, M'_4, ..., M'_Y represent an atomic ratio of each metallic element having a valence of 4 or less, the atomic ratio being to Ti of titanium dioxide, n'_1, n'_2, n'_3, n'_4, ..., n'_Y represent a valence number of each metallic element having the atomic ratio of M'_1, M'_2, M'_3, M'_4, ..., M'_Y, Y in M'_Y and n'_Y represents the number of the metallic element contained in the titanium dioxide and can have a natural number of 1 or more.

5. A method for producing an electroconductive powder which comprises adding an aqueous acidic solution in which a tin compound and a phosphorus compound are dissolved and an aqueous alkaline solution to an aqueous suspension of titanium dioxide in which the content of a metallic element having a valence of 4 or less contained in the titanium dioxide as an impurity is 0.02 or less as (B) obtained by the above formula (2) with maintaining pH of the aqueous

suspension in the range of 2-6 or 8-12, then fractionating the resulting product, and firing the product at a temperature of 600-925°C to form an electroconductive layer containing tin oxide and phosphorus on the surface of the titanium dioxide.